



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,194	04/11/2006	Kenny Tai	003D.0083.U1(US)	5652
87120	7590	07/02/2009		
Harrington & Smith PC 4 Research Drive, Suite 202 Shelton, CT 06484			EXAMINER PATEL, HARSHAD C	
			ART UNIT	PAPER NUMBER
			2839	
			MAIL DATE	DELIVERY MODE
			07/02/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/560,194

**Applicant(s)**

TAI ET AL.

**Examiner**

HARSHAD C. PATEL

**Art Unit**

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-18, 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/8/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claims 16 is objected to because of the following informalities:
  - Claim 16, line 1, "claim 1" should be changed to --claim 12--.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

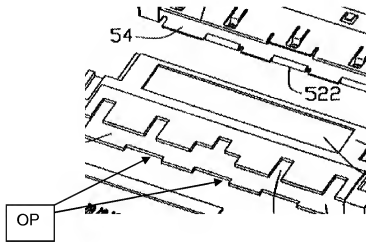
Claims 1 - 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Ko US 6,273,753).

Regarding claim 1, Ko, figs 1 - 9, discloses a receptacle connector assembly 1, comprising: a connector housing 20+40 having a top surface, a bottom surface, and a peripheral wall located between the top surface and bottom surface; a plurality of terminals 30 mounted in the connector housing 20+40 and extending from the peripheral wall; a shielding member 50 removably attached to the top surface of the connector housing and having a portion extending over the terminals; and a supporting member 309 removably attached to the connector housing and covering the portion of the shielding member (from inner side) extending over the terminals.

Regarding claim 2, Ko discloses, the shielding member 50 includes a plurality of positioning pins 522, and the connector housing is formed with a

Art Unit: 2839

plurality of openings OP at locations corresponding to the positioning pins 522 for insertion of the positioning pins.



Regarding claim 3, Ko, discloses a locking mechanism 502 & peripheral wall of slot 412 for removably locking the shielding member to the connector housing 40.

Regarding claim 4, Ko, fig 7, discloses the locking mechanism comprises: a plurality of resilient tabs 502 formed on the shielding member, and a plurality of protrusions the peripheral wall of slot 412 formed on the connector housing at locations corresponding to the resilient tabs to be removably locked to the protrusions.

Regarding claim 5, Ko, discloses a mounting mechanism 201 for removably mounting the supporting member to the connector housing.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2839

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 - 5 and 12 - 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin (US 6,717,818).

Regarding claim 1, Lin, figs 1 - 6, discloses a receptacle connector assembly 1, comprising: a connector housing 20+40 having a top surface, a bottom surface, and a peripheral wall located between the top surface and bottom surface; a plurality of terminals (of the connector 44) mounted in the connector housing 20+40 and extending from the peripheral wall; a shielding member 50 removably attached to the top surface of the connector housing and having a portion extending over the terminals; and a supporting member 10 removably attached to the connector housing and covering the portion of the shielding member extending over the terminals.

Regarding claim 2, Lin, figs 1 - 6, discloses the shielding member 50 includes a plurality of positioning pins 54, and the connector housing is formed with a plurality of openings (corresponding) 142 at locations corresponding to the positioning pins for insertion of the positioning pins.

Regarding claim 3, Lin, figs 1 - 6, discloses a locking mechanism 514 (fig 5) + 150 (fig 5) for removably locking the shielding member to the connector housing 40.

Regarding claim 4, Lin, figs 1 - 6, discloses the locking mechanism comprises: a plurality of resilient tabs 514 formed on the shielding member, and

Art Unit: 2839

a plurality of protrusions 150 on the connector housing to be removably locked to the protrusions.

Regarding claim 5, Lin, figs 1 - 6, discloses a mounting mechanism 150 for removably mounting the supporting member 10 to the connector housing 20+40.

Regarding claim 12, Lin figs 1 - 6, discloses an IC card connector 1, comprising: a header 20+40+44 having a top surface, a bottom surface, and a peripheral wall located between the top surface and bottom surface; a metal shield 440 mounted over a portion of the top surface of the header 44; a plurality of terminals (of connector 44) mounted in the header and extending from the peripheral wall; a shielding member 50 removably attached to the top surface of the header and having a portion extending between the shield and the terminals; and a supporting member 10 removably attached to the header and extending between the metal shield 50 and the shielding member 440 (as there are laying between the top cover 10 and bottom cover 20).

Regarding claim 13, Lin figs 1 - 6, discloses the shielding member 50 includes a plurality of positioning pins 54, and the connector housing is formed with a plurality of openings (corresponding) 142 at locations corresponding to the positioning pins for insertion of the positioning pins.

Regarding claim 14, Lin figs 1 - 6, discloses a locking mechanism 514 (fig 5) + 150 (fig 5) for removably locking the shielding member to the header 20+40.

Regarding claim 15, Lin figs 1 - 6, discloses the locking mechanism comprises: a plurality of resilient tabs 514 formed on the shielding member, and

Art Unit: 2839

a plurality of protrusions 150 on the header to be removably locked to the protrusions.

Regarding claim 16, Lin figs 1 - 6, discloses a mounting mechanism 460 & 150 for removably mounting the supporting member 10 to the header 20+40.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko US 6,273,753 in view of Olsson (US 4,653,825).

Regarding claim 6, Ko discloses all the claim limitation as applied to claim 5, except that the mounting mechanism comprises: a pair of posts symmetrically arranged on the top surface at two opposing ends of the connector housing; and a pair of holes formed on the supporting member at locations corresponding to the posts for insertion of the posts.

Olsson figs 1 and 2, discloses a mounting mechanism 48+66 comprises: a pair of posts 66 on support block and a pair of holes 48 formed on the supporting housing at locations corresponding to the posts for insertion of the posts.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a pair of posts; and a pair of holes formed on the supporting member at locations corresponding to the posts for insertion of the posts to the mounting system of Ko as taught by Olsson.

The motivation for making the modification is to have better alignment of the other components with in the housing and to have better mechanical holding there in between.

Regarding claim 7, the combine art of Ko and Olsson discloses the posts serve as rivets to secure the supporting member on the connector housing.

6. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko US 6,273,753).

Regarding claim 10 and 11, Ko discloses the claimed invention except for the supporting member is made of an insulating material and of plastic.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the supporting member is made of an insulating material and made of plastic, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

The motivation for making the modification is to have ease of manufacture and plastic material is widely available at lower cost resulting into the reduced costs.



Art Unit: 2839

7. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 6,717,818) in view of Olsson (US 4,653,825).

Regarding claim 17, Lin, discloses all the claim limitation as applied to claim 16, except that the mounting mechanism comprises: a pair of posts symmetrically arranged on the top surface at two opposing ends of the header; and a pair of holes formed on the supporting member at locations corresponding to the posts for insertion of the posts.

Olsson figs 1 and 2, discloses a mounting mechanism 48+66 comprises: a pair of posts 66 on support block and a pair of holes 48 formed on the supporting housing at locations corresponding to the posts for insertion of the posts.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a pair of posts; and a pair of holes formed on the supporting member at locations corresponding to the posts for insertion of the posts to the mounting system of Lin as taught by Olsson.

The motivation for making the modification is to have better alignment of the other components with in the housing and to have better mechanical holding there in between.

Regarding claim 18, the combine art of Lin and Olsson discloses the posts serve as rivets to secure the supporting member on the connector housing.

8. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 6,717,818).

Regarding claim 20 and 21, Lin discloses the claimed invention except for the supporting member is made of an insulating material and of plastic.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the supporting member is made of an insulating material and made of plastic, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

The motivation for making the modification is to have ease of manufacture and plastic material is widely available at lower cost resulting into the reduced costs.

#### ***Allowable Subject Matter***

9. Claims 8, 9, 19 and 20 objected to as being dependent upon a rejected base claim, and to overcome the rejection under 35 U.S.C. 112, 2nd paragraph as set as set forth in this Office action, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### **Reasons for Allowances**

10. The following is an examiner's statement of reasons for allowance:

Regarding claims 8, 9, 19 and 20, the prior art does not disclose or suggest a receptacle connector / IC connector assembly comprising a mounting mechanism comprises: a recess formed at each of two opposing ends of a connector housing (header) for press-fitting opposing ends of a supporting

Art Unit: 2839

member as required by these claims in combination of other limitations of these dependent claims.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harshad C. Patel whose telephone number is 571-272-8289. The examiner can normally be reached on M - F; 8:00 AM TO 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, T. C. Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/H. C. P./  
Examiner, Art Unit 2839  
6/30/09

/T C Patel/

Art Unit: 2839

Supervisory Patent Examiner, Art Unit 2839